

# SEQUENCE LISTING

<110> Cao, Liangxian  
 Trifillis, Panayiota

<120> METHODS FOR IDENTIFYING COMPOUNDS THAT MODULATE UNTRANSLATED  
 REGION-DEPENDENT GENE EXPRESSION AND METHODS OF USING SAME

<130> 10589-012-999

<140> US 10/543,033  
 <141> 2004-01-21 (371c date)

<150> PCT/US2004/001643  
 <151> 2004-01-21

<150> 60/441,637  
 <151> 2003-01-21

<160> 90

<170> PatentIn version 3.2

<210> 1  
 <211> 14  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: consensus G-quartet element from  
 synthetic sequences

<220>  
 <221> misc\_feature  
 <222> 3, 7, 8, 11  
 <223> n = a, t, c, or g

<220>  
 <221> misc\_feature  
 <222> (7)..(8)  
 <223> This represents one form of the sequence as described, other forms  
 described may have up to five nucleotides in this variable region

<400> 1  
 ggntggnggg ntgg

14

<210> 2  
 <211> 14  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic G-quartet  
 oligonucleotide

<220>  
 <221> misc\_feature  
 <222> 3, 4, 7, 8, 11, 12  
 <223> n = a, t, g or c

<220>  
 <221> misc\_feature  
 <222> 3, 4, 7, 8, 11, 12  
 <223> This represents one form of the sequence as described, other forms described have longer variable regions, typical is 2 - 10 nucleotides

<400> 2  
 ggnnggnngg nngg 14

<210> 3  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Antisense minus uORF NcoI primer

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 ggcccatg ctccgctgg acccgctgg gaccgctg ggagggcgcg ggagggcgcg 60  
 g 61

<210> 4  
 <211> 19  
 <212> RNA  
 <213> Oryctolagus cuniculus

<220>  
 <223> subunit of 15-LOX-DICE

<400> 4  
 ccccrccuc uuccccaag 19

<210> 5  
 <211> 152  
 <212> DNA  
 <213> Homo sapiens

<400> 5  
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 gacgccacat ccctgacaa gctgccaggc aggttctctt cctctcacat actgaccac 120  
 ggctccacc tctctccct ggaaaggaca cc 152

<210> 6  
 <211> 792  
 <212> DNA  
 <213> Homo sapiens

<400> 6  
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 cctccttca gacacctca acctcttctg gctcaaaaag agaattgggg gcttagggtc 120

ggaacccaag cttagaactt taagcaacaa gaccaccact tcgaaacctg ggattcagga 180  
 atgtgtggcc tgcacagtga attgctggca accactaaga attcaaactg gggcctccag 240  
 aactcactgg ggcctacagc ttgatccct gacatctgga atctggagac caggagacct 300  
 ttggttctgg ccagaatgct gcaggacttg agaagacctc acctagaaat tgacacaagt 360  
 ggaccttagg ccttcctctc tccagatgtt tccagacttc cttgagacac ggagcccagc 420  
 cctcccatg gagccagctc cctctattta tgtttgcact tgtgattatt tattatttat 480  
 ttattattta tttatttaca gatgaatgta tttatttggg agaccggggg atcctggggg 540  
 acccaatgta ggagctgcct tggctcagac atgttttccg tgaaaacgga gctgaacaat 600  
 aggctgttcc catgtagccc cctggcctct gtgccttctt ttgattatgt tttttaaaat 660  
 atttatctga ttaagttgtc taaacaatgc tgatttggg accaactgtc actcattgct 720  
 gagcctctgc tccccagggg agttgtgtct gtaatcgccc tactattcag tggcgagaaa 780  
 taaagtttgc tt 792

<210> 7  
 <211> 21  
 <212> RNA  
 <213> Homo sapiens

<220>  
 <223> Group I AU-Rich element(ARE) cluster of 3'untranslated region

<400> 7  
 auuuuuuuau uuauuuuuu a 21

<210> 8  
 <211> 40  
 <212> DNA  
 <213> Homo sapiens

<400> 8  
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<210> 9  
 <211> 289  
 <212> DNA  
 <213> Homo sapiens

<400> 9  
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 gaccaagggg tgggccacag ccattggtgg agtggcctgg acctgccctg ggccacactg 120  
 accctgatac aggcattggc gaagaatggg aatattttat actgacagaa atcagtaata 180  
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<210> 10  
 <211> 7008  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Expression Vector pCMRI

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 cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180  
 ttaggggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240  
 gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300  
 tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360  
 ccgcgccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420  
 attgacgtca atgggtggag tatttacggg aaactgccca cttggcagta catcaagtgt 480  
 atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540  
 atgccagta catgacctta tgggactttc ctacttgcca gtacatctac gtattagtca 600  
 tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660  
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ctgcctgcgt cagattctcg catgccagag atcctatttt tggcaatcaa atcattccgg	1560
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atztatcagg gttattgtct catgagcgga tacatatattg aatgtattta gaaaaataaa	6960
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 <210> 12  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 12  
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 <210> 15  
 <211> 427



<212> DNA  
 <213> Homo sapiens

<400> 15  
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 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Expression Vector pCMR2

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 ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta acgccaatag 180  
 ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac ttggcagtac 240  
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<210> 42  
 <211> 233  
 <212> DNA  
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<400> 42  
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aatatgatct attttatgca tattgtttat aaagacacat ttacaattta cttttaatat	180
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<210> 43  
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cctggccaat ggaaactgag gtaggcgggt catcgcgctg gggctctgtg tctgagcgct	180
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 <212> DNA  
 <213> Homo sapiens

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aaaagccaca ttacaagctg ccatccctc cccgtttcag tggaccctgt ggccaggtgc	240
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 <213> Homo sapiens

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 <213> Homo sapiens

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 <212> DNA  
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cccccacctc tggacttgcc ttctcttctc ttctccgct gtggaggagg ccagcgctta	240
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<210> 48  
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 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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caagcgacgc cgggaaa	197

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 <211> 3293  
 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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at	aaaagag	agg tgcaacg
gaa	gccaga	acat 120
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cagt	ttctcg	agga atcagc
atc	agcattc	agtcaat
ccg		180
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gtg	attggc	tggg caggaac
agc	gccggg	gcgt 240
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tgc	cacagga	agc ctgagc
tc	tcagag	tagcg 300
gctctt	ccaa gctcaa	agaa gcagag
gccg	ctgttc	gttt cctttag
gtc	tttaggt	c tttccact
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cacg	tcttggt	ggc cgttcca
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 <212> DNA  
 <213> Homo sapiens

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<210> 53  
 <211> 239  
 <212> DNA  
 <213> Homo sapiens

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gaaagcagaa cccgcagagt cctccctgct gctgtgtgga cgacacgtgg gcacaggcag	180
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<210> 54  
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 <212> DNA  
 <213> Homo sapiens

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ctgcctccca	cgctgggaca	cagaccggcc	gcatgtctgc	atggcagaag	cgtctccctt	1920
gccacggcct	gggaggggtg	ttcctgttct	cagcatccac	taatattcag	tcctgtatat	1980
tttaataaaa	taaacttgac	aaaggaaaaa	aaaaccg			2017

<210> 65  
 <211> 97  
 <212> DNA  
 <213> Homo sapiens

<400> 65	
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cgctccacag	ccagacgccc
tcagacagca	60
aagcctaccc	ccgcgccgcg
ccctgccgcg	cgctgcg
	97

<210> 66  
 <211> 1474  
 <212> DNA  
 <213> Homo sapiens

<400> 66  
 aagtctaatag atcataattta tttattttata tgaaccatgt ctattaattt aattatttta 60  
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 ctgttgcgga gaaaggagtc atacttgtga agactttttat gtcactactc taaagatttt 180  
 gctgttgctg ttaagtttgg aaaacagttt ttattctgtt ttataaacca gagagaaatg 240  
 agttttgacg tctttttact tgaatttcaa cttatattat aaggacgaaa gtaaagatgt 300  
 ttgaatactt aaacactatc acaagatgcc aaaatgctga aagtttttac actgtcgtatg 360  
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 tttgggtatt tttctgtcat caaacaaaac aggtatcagt gcattattaa atgaatattt 480  
 aaattagaca ttaccagtaa tttcatgtct acttttttaa atcagcaatg aaacaataat 540  
 ttgaaatttc taaattcata gggtagaatc acctgtaaaa gcttgtttga tttcttaaag 600  
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 atgacctcat aaaatacctc ttcaaaatgc ttaaattcat ttcacacatt aattttatct 1200  
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 tattttctta cctgaacttt tgcaagtttt caggtaaacc tcagctcagg actgctattt 1440  
 agctcctctt aagaagatta aaaaaaaaaa aaaa 1474

<210> 67  
 <211> 99

<212> DNA  
 <213> Homo sapiens

<400> 67  
 gcgcccggcc cccacccctc gcagcacccc gcgccccgcg ccctcccagc cgggtccagc 60  
 cggagccatg gggccggagc cgcagtgagc accatggag 99

<210> 68  
 <211> 614  
 <212> DNA  
 <213> Homo sapiens

<400> 68  
 tgaaccagaa ggccaagtcc gcagaagccc tgatgtgtcc tcagggagca gggaaggcct 60  
 gacttctgct ggcatcaaga ggtgggaggg ccctccgacc acttccaggg gaacctgcca 120  
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 gaggaaggaa cagcaatggg gtcagtatcc aggccttcta cagagtgcct ttctgttttag 480  
 tttttacttt ttttgttttg tttttttaaa gacgaaataa agaccaggg gagaatgggt 540  
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 tatattttgg aaaa 614

<210> 69  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer 1 for amplify VEGF 5'UTR

<400> 69  
 aaagtcgacg taatcgcgga ggcttggggc agccgg 36

<210> 70  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer 2 for amplify VEGF 5'UTR

<400> 70  
 tttgcgactg gtcagctgcg ggatccaag 30

<210> 71  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer 3 for amplify VEGF 5'UTR  
  
 <400> 71  
 aagtcgacgt aagagctcca gagagaagtc gag 33  
  
 <210> 72  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer 4 for amplify VEGF 5'UTR  
  
 <400> 72  
 aaacccgggc agcaaggcaa ggctccaatg cac 33  
  
 <210> 73  
 <211> 39  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer 5 for amplify VEGF 3'UTR  
  
 <400> 73  
 gccgggcagg aggaaggagc ctccctcagg gtttcggga 39  
  
 <210> 74  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer 6 for amplify VEGF 3'UTR  
  
 <400> 74  
 ctgcactaga gacaaagacg tgatgttaat 30  
  
 <210> 75  
 <211> 66  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Polylinker  
  
 <400> 75  
 gaacaaatgt cgacgggggc cctagcaga tctagcgctg gatcccccg ggagctcaug 60  
 gaagac 66

<210> 76  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer for luciferase amplification  
  
 <400> 76  
 cggtgttggg cgcgttattt atcggagttg 30  
  
 <210> 77  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer for luciferase amplification  
  
 <400> 77  
 ttggcgaaga atgaaaatag ggttggtact 30  
  
 <210> 78  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer for GAPDH amplification  
  
 <400> 78  
 ggtgaaggtc ggagtcaacg ga 22  
  
 <210> 79  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Primer for GAPDH amplification  
  
 <400> 79  
 gagggatctc gctcctggaa g 21  
  
 <210> 80  
 <211> 55  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: 5'UTR forward oligo  
  
 <400> 80

aaagtcgacg taaccgccag atttgaatcg cgggacccgt tggcagaggt ggcgg 55

<210> 81  
<211> 54  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: 5'UTR reverse oligo

<400> 81  
aaaggatccg ggcaacgtcg gggcacccat gccgccgccg ccacctctgc caac 54

<210> 82  
<211> 40  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: 3'UTR forward oligo

<400> 82  
aaagcggccg cggcctctgc cggagctgcc tgggccaga 40

<210> 83  
<211> 37  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: 3'UTR reverse oligo

<400> 83  
aaatctagac tcaggaacag ccgagatgac ctccaga 37

<210> 84  
<211> 67  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SL top oligonucleotide

<400> 84  
ctagaagctt agggccgcgc atccgcgcgc ggttcgccgc gcgcggatcc gcggtagcaa 60

gttagtc 67

<210> 85  
<211> 68  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SL bottom oligonucleotide



<400> 85  
 gactaagctt gctaccgagg atccgcgcgc gccgaaccgc gcgcggatcc gcggccctaa 60  
 gcttctag 68

<210> 86  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PCR primer (Sense/HindIII)

<400> 86  
 caagaagctt gcgcccggcc cccaccccct cg 32

<210> 87  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PCR primer (Antisense/NcoI)

<400> 87  
 agcccatggt gctcactgcg gtcgggccc c 31

<210> 88  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PCR primer (Sense/BglIII)

<400> 88  
 agactctgaa ccagaaggcc aa 22

<210> 89  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PCR primer (Antisense/KpnI)

<400> 89  
 ctcggtacca gttttccaaa atatatttgc aaatgg 36

<210> 90  
 <211> 58  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: sense minus uORF HindIII primer

<400> 90

cccaagcttc gcgcccggcc cccacccct cgcagcacc cgcgccccgc gccctccc

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